



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,892	07/28/2003	Cheng-Geng Jan	10112541	7422
34283	7590	09/15/2005		
QUINTERO LAW OFFICE 1617 BROADWAY, 3RD FLOOR SANTA MONICA, CA 90404			EXAMINER TRAN, CHUC	
			ART UNIT	PAPER NUMBER
			2821	
DATE MAILED: 09/15/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/628,892

Applicant(s)

JAN ET AL.

Examiner

Chuc D. Tran

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-11,27 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-11,27 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 3, 5-11 and 27-28 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 6-9 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Desclos et al (USP. 6,160,512).

Regarding claim 1, Desclos et al disclose a complex antenna apparatus, comprising:

- a base (14) having a central through hole (17) and a ground (14) (Fig. 3);
- a circular polarization antenna (12) disposed on the base (32) and having a hollow feeding portion (16) (Fig. 3 & 4) corresponding to the central through hole (Fig. 4) (Col. 4, Line 18); and
- a capacitance loading monopole antenna (Fig. 7)) disposed in the central through hole of the base (14) (Fig. 7) comprising a monopole linear antenna (11) and a conductive element (42) (Fig. 11) covering the monopole linear antenna (Fig. 11), wherein the conductive element is separated from the ground of the base (14) (Fig. 7).
- Regarding claim 3, Desclos et al disclose that a dielectric disposed between the conductive element (42) and monopole linear antenna (11) (Fig. 11).

Regarding claim 6, Deslos et al disclose that the circular polarization antenna (12) is rectangular (Fig. 7).

Regarding claim 7, Desclos et al disclose that an RF module (24) connected to the circular polarization antenna and capacitance loading monopole antenna (Fig. 9).

Regarding claim 8, Desclos et al disclose that the circular polarization antenna (12) and capacitance loading monopole antenna connected to the RF module (24) (Fig. 9) via the through hole and central through hole of the base (Fig. 9).

Regarding claim 9, Rankin et al disclose that a demodulator connected to the RF module (Fig. 9).

Regarding claim 27, Desclos et al disclose a complex antenna apparatus, comprising:

- a base (14) having a central through hole (17) (Fig. 7);
- a circular polarization antenna (12) disposed on the base and having a hollow feeding portion (16) corresponding to the central through hole (Fig. 7);
- a capacitance loading monopole antenna disposed in the central through hole of the base via the hollow feeding portion of the circular polarization antenna (Fig. 9);
- an RF module (24) connected to the circular polarization antenna and capacitance loading monopole antenna (Fig. 9); and
- a demodulator (24) connected to the RF module (Fig. 9).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2821

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, 10-11 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desclos et al.

Regarding claim 5, Desclos et al disclose a complex antenna apparatus as set forth in the claims except the circular polarization antenna is circular. Thus, it would have been obvious to one of ordinary skill in the art to modify Desclos et al by providing the circular polarization antenna is circular. The ordinary artisan would have been motivated to modify Desclos et al in the manner described above for providing a circular polarized antenna which generates a circular polarization (Col. 4, line 16). It matter of obvious of design choice.

Regarding claims 10-11, Desclos et al disclose a complex antenna apparatus as set forth in the claims except the base is ceramic and the dielectric is Teflon. Thus, it would have been obvious to one of ordinary skill in the art to modify Desclos et al by providing the base is ceramic and the dielectric is Teflon. The ordinary artisan would have been motivated to modify Desclos et al in the manner described above for providing the base is ceramic (See Desclos et al Col. 4, Line 57) and the dielectric disposed between the conductive element and the monopole linear antenna is Teflon (the dielectric disposed between the conductive element (42) and the monopole linear antenna (41) in Fig. 11 of Desclos et al is an air) in order to support structure is designed for having a complete matching and giving power at a high frequency.

Regarding claim 28, Desclos et al disclose a complex antenna apparatus as set forth in the claims except the dielectric is Teflon. Thus, it would have been obvious to one of ordinary skill in the art to modify Desclos et al by providing the dielectric is Teflon. The ordinary artisan would have been motivated to modify Desclos et al in the manner described

Art Unit: 2821

above for providing the dielectric disposed between the conductive element and the monopole linear antenna is Teflon (the dielectric disposed between the conductive element (42) and the monopole linear antenna (41) in Fig. 11 of Desclos et al is an air) in order to have a complete matching and giving power at a high frequency.

Citation of relevant Prior Art

Prior art Fukae et al (USP. 6,778,149) disclose composite antenna apparatus.

Prior art Kershaw (USP. 5,016,022) disclose monopole inductively loaded antenna tuning system.

Prior art Sanford et al (USP. 6,313,801) disclose antenna structures including communication devices.

Prior art Izadian (USP. 5,300,936) disclose multiple band antenna.

Inquiry


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuc D. Tran whose telephone number is (571) 272-1829. The examiner can normally be reached on M-F Flex hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2821

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TC
September 7, 2005


Wilson Lee
Primary Examiner